



Basics of Behavioural Safety Pros and Cons of Implementation

ARTICLE No 10

This paper is based on the findings of four major Behavioural Safety users' conferences held in Europe over the past five years as well as research and practical work in America, the Middle East, the Far East, Africa and Russia. It covers best practise for all of the 6 major pillars of behavioural safety as well as the most important recent controversies.

Behavioural Safety – Basic Principles and Recent Developments

It has become apparent that even large investments in managing and designing safety often deliver diminishing returns because the vast majority of accidents are now "behavioural" (UK HSE and industry figures suggest between 70 and 95 per cent).

Consequently a lot of effort has been spent on trying to change behaviour by changing attitudes or motivation levels. Unfortunately, attitude change is notoriously difficult to achieve. Even very high impact events, like Hillsborough and September the 11th have had a limited long-term impact on people's day-to-day attitudes.

Even if attitude change is achieved behaviour may stay the same if the environment remains unchanged. (One of the most important 'laws' of psychology - the "fundamental attribution error" - is that the influence of the environment is greatly and consistently underestimated when evaluating behaviour). Further, the impact of increased motivation is typically only short term - think of the length of time a new football club manager has a positive impact simply because he is new.

Consequently most UK companies now adopt some form of behavioural approach – basically an approach that focuses on day-to-day behaviours or conditions caused by day to day behaviours. (So measures include basic housekeeping as well as PPE, manual handling and use of tools for example).

Basic Options

Put simply there are two main types of behaviourally focussed programmes – "top down" and "full". Top down programmes are largely run through management and front-line supervision and are far easier to implement. The aim is to treat unsafe behaviours in a "zero tolerance" but also "adult" fashion. "Transgressors" will have their unsafe behaviour pointed out and will be engaged in a discussion about the potential consequences of their actions. Ideally, the conversation will close with a spontaneous promise not to repeat the behaviour although sometimes such a promise will have to be actively elicited.

"Full" programmes, originally based on the quality work of Deming, contain all the elements of top down initiatives but also give emphasis to the accurate and systematic measurement of behaviour and to greater involvement of the front-line workforce. Because their primary focus is measurement and analysis rather than compliance they also tend to give greater weight to the root cause analysis of the unsafe behaviours in question. There are, of course, any number of combinations and alternatives – some better than others.

Perhaps the main finding of the user conferences was that companies must ensure the approach they take is tailored to suit their own circumstances. Prescriptive "off the shelf" approaches may be suitable – but equally may well not be.

A 'full' behavioural safety programme is based on six pillars:

- Root-cause analysis;
- Measurement;
- Feedback (and goal-setting);
- Awareness-raising;
- Workforce ownership; and
- Management and supervision.

The best programmes show a systematic coverage of all 6 pillars. Certainly, at the inaugural "behavioural safety achievement of the year" awards the entries that were short-listed by an independent panel all demonstrated such a systematic and comprehensive approach.

To consider each in turn:-

1 ROOT-CAUSE ANALYSIS (RCA)

It cannot be said too clearly that RCA is the core of all good behavioural safety and behavioural analysis must be integrated fully with all other safety efforts. Approaches calling themselves BBS that do not have a strong element of RCA are merely initiatives with a behavioural flavour.

A basic assumption is that in the vast majority of cases unsafe acts are for a reason that makes sense to the individual at the time. A fundamental assumption of most safety management is that people are long-term, rational and logical in their thinking - but as with things such as smoking, speeding, bad eating habits, etc. we respond best to rewards that are soon, certain and (at the time) positive - temptations in other words. Consequently, companies have found that where the safe way is for example inconvenient, impractical or uncomfortable, simply making the safe way as quick, comfortable and convenient as the unsafe way is often a very cost-effective and intelligent way of improving safety behaviour.

Company's find that this "designing out temptations whenever possible" approach generally proves far more effective than increasing punitive action or fine tuning existing systems - especially because design solutions are permanent.

2 OWNERSHIP

Nothing gives a BBS programme more "fire" than genuine shop-floor ownership. Here, it is vitally important to distinguish between some form consultation and genuine ownership. With genuine ownership the work-force will for example:-

- choose which behaviours are to be included on measures and the standards
- have the freedom to design their own programme.
- name the programme and may choose to run a logo competition.
- control all data generated.
- have the genuine choice not to run a programme at all.

The key difference between ownership and consultation is the power to make genuinely independent decisions. The problem with such ownership is that it requires a lot of in-house time to attend meetings and collect data etc. and this on-going time commitment is something that even highly profitable companies can find difficult if commitment at senior management levels is at all weak.

3 MEASUREMENT

Companies report focussing on the following areas:-

- Housekeeping
- Personal Protective Equipment.
- Access to Heights Lifting Operations.
- Use of Fork Lift Trucks
- Scaffolding
- Use of Tools
- Movement About Site
- Manual Handling

"Behavioural" items therefore include actions such as twisting when lifting, not wearing PPE or not holding the handrail as well as conditions caused by recent behaviour such as housekeeping.

For the benefits of "if we can measure it we can manage it" accurate percentage data is required but collecting accurate data is difficult and some reputable processes knowingly forgo this benefit. (Genuinely comparable percentage data that can compete with other KPIs requires very clear and precise definitions and illustrations, the application of good sampling methodology and time consuming on-going quality assurance checking).

Sampling. However, the need for good sampling holds true even if it is only the benefits of "what gets measured gets done" that are sought. The "Catch 22" is that it is of course most difficult to free employees to take measures when the site is busiest and most dangerous and although some companies allow employees an hour or more twice a week to walk the entire site and to score other contractors and trades others simply score their own work area – a much quicker and easier approach but one that loses the benefits of "fresh eyes" and the cross pollination of ideas.

4 FEEDBACK (& GOAL-SETTING)

Feedback can involve:-

- percentage feedback charts,
- weekly dedicated sessions,
- one-to-one ad hoc conversations,
- leaflets,
- "add-ons" at weekly briefs or at a tool-box talks.

A meaningful goal-setting session will require good percentage data (see above) and the most influential sessions are ones where hard but realistic goals are set by the workforce themselves. Assigned goals may focus the mind of management and direct their resources and attention - important of course - but have little direct impact on employees' motivation.

What is a hard but realistic goal? Halving the number of incidents or unsafe acts within a year has been shown time and again to be very achievable. (For example, taking housekeeping scores from 60% to 80% or from 80% to 90%). Any number of organisations report achieving this standard - and much more.

Praise. Simply increasing the incidence of praising individuals - especially those who have started to act more safely and those who are collecting the data and ideas - is a key element of virtually all processes. It is a given when assessing any organisation that the workforce will complain they get too little feedback - and that what there is tends to be overly negative. If nothing else implementing a good behavioural programme gives management plenty of scope for improving this situation without patronising the workforce.

Action. Acting on ideas (or simply explaining why not) is perhaps the single most motivating behaviour management can undertake. At user conferences employees tend to boast not about accident rates - but about what they "got changed".

5 AWARENESS-RAISING

Although awareness-raising alone cannot deliver a long term impact on safety standards (as above) it can be a vital part of launching a process. To this end many behavioural practitioners have begun working along side presenters such as Ken Woodward and Ian Whittingham (See videos such as "Ken's Story" and the HSE's "Turning Concern into Action"). Their evocative personal testimonies are an excellent way of reinforcing the message that accidents do happen.

In behavioural terms this is a simple process of reminding individuals about the laws of "Heinrich's Triangle". That is that whilst a company or individual may get away with an unsafe act hundreds or even thousands of times - eventually some-one, some-where won't get away with it. It's a question of working the odds. For example, even though the chance of falling down the stairs when not holding the handrail may be only 1 in 100,000, that particular behaviour could easily happen a million times a year at a given location. (Climbing steep metal stairs unsafely on an oil rig is the single biggest cause of off-shore injury).

Importantly, this "initiative" element of the programme will tend to have more impact than typical "safety initiatives" if it is at least designed by the workforce themselves. (See ownership above). One North Sea oil platform described how they decided to play the song "Stairway to

Heaven" over the p.a. system to raise awareness of holding the handrail. It must have worked as they won their company's safety team of the year award.

6 SUPERVISORS AND MANAGEMENT.

Last but certainly not least. At the very least management need to receive a full briefing that covers:-

- why the process is being introduced and what it aims to achieve.
- what is required of them to support the process and precisely what they need to do when they are inconvenienced by the process on a day-to-day basis. That is, manage the situation or - if that is genuinely too difficult at the time - take their problems up to more senior management rather than passing them down to the volunteers through such as body language or voice tone. (Or outright obstruction). Research shows that up to 85% of a communication is in the body language and voice tone and supervisors (and the rest of us) use that when they want to subtly manage a situation to their short term advantage!
- genuinely consult them about any logistical difficulties they foresee.

Experience shows clearly that what is perceived by front-line management as "highly desirable" to senior management will not compete with what is perceived as "essential" without concerted follow-up, clearly budgeted resources and appropriately targeted negative feedback. Experience suggests that the logistical discussion between fully briefed supervisors and senior managers is by far the most important event of a process introduction.

Tying the Elements Together - a Case Study

During a two-week closedown on a major chemical site, behavioural scores for housekeeping, PPE and access to heights - which had been improving steadily -plummeted for the duration. Although no-one was hurt and no incidents were reported the behavioural team had statistical proof that the amount of risk had increased significantly. The team undertook some root-cause analysis of the poor performance and made several suggestions relating to the selection, induction and monitoring of the contractors – all of which were implemented during the next closedown. (Monitoring included both one-to-one and statistical feedback via charts). During this closedown the behavioural percentage scores hardly dropped at all. Quite correctly, they boasted that they had learnt from the previous shutdown and that they were "pro-actively managing the risk upstream of any incidents". This mix of pro-active data collection, analysis and informed planning is behavioural safety at its best.

About the author

Tim Marsh, then at UMIST was one of the team leaders of the original UK research into behavioural safety in the early 1990s. As a consultant he has since worked with more than 90 major organisations, has twice been invited to present to the European Conference Board on the topic of BBS and was expert witness at the "Safety Culture" and "Management of Change" open forums at the Cullen Inquiry (Ladbroke Grove). He has chaired several dozen conferences on Behavioural Safety in the UK as well as major conferences in Dubai, South Africa, Malaysia and India. In 2003 Ryder-Marsh clients came both first and runner-up at the independently assessed "Allan Poole, Behavioural Safety Achievement Awards".

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